ring nodes :
1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   20   21   22   23
24   25   26   27   28   29   30   31   32   33   34   35   36   37   38   39   40   41   42   43   44
ring bonds :
1-2   1-6   2-3   3-4   4-5   4-7   5-6   5-37   6-16   7-8   7-12   8-9   9-10   10-11   10-43
11-12   13-14   13-18   13-39   14-15   15-16   16-17   17-18   19-20   19-24   20-21   20-34
21-22   21-38   22-23   22-25   23-24   25-26   25-30   26-27   27-28   28-29   28-44   29-30
31-32   31-36   31-40   32-33   33-34   34-35   35-36   37-41   37-42   38-41   38-42   39-40
43-44
exact/norm bonds :
4-7   5-37   6-16   10-43   13-39   20-34   21-38   22-25   28-44   31-40   37-41   37-42
38-41   38-42   39-40   43-44
normalized bonds :
1-2   1-6   2-3   3-4   4-5   5-6   7-8   7-12   8-9   9-10   10-11   11-12   13-14   13-18
14-15   15-16   16-17   17-18   19-20   19-24   20-21   21-22   22-23   23-24   25-26   25-30
26-27   27-28   28-29   29-30   31-32   31-36   32-33   33-34   34-35   35-36

Match level :
1:Atom   2:Atom   3:Atom   4:Atom   5:Atom   6:Atom   7:Atom   8:Atom   9:Atom   10:Atom
11:Atom   12:Atom   13:Atom   14:Atom   15:Atom   16:Atom   17:Atom   18:Atom   19:Atom
20:Atom   21:Atom   22:Atom   23:Atom   24:Atom   25:Atom   26:Atom   27:Atom   28:Atom
29:Atom   30:Atom   31:Atom   32:Atom   33:Atom   34:Atom   35:Atom   36:Atom   37:Atom
38:Atom   39:Atom   40:Atom   41:Atom   42:Atom   43:Atom   44:Atom

L1   STRUCTURE UPLOADED

```
=> d his


     (FILE 'HOME' ENTERED AT 12:42:48 ON 30 MAR 2008)


     FILE 'REGISTRY' ENTERED AT 12:43:04 ON 30 MAR 2008
L1               STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1               STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 12:43:33 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     4688 TO ITERATE

 42.7% PROCESSED     2000 ITERATIONS                                0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       89654 TO     97866
PROJECTED ANSWERS:              0 TO         0

L2               0 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 12:43:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    93556 TO ITERATE

100.0% PROCESSED    93556 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

L3               0 SEA SSS FUL L1

=> fil caplus
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                                                  ENTRY        SESSION
FULL ESTIMATED COST                             179.28        179.49

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FILE LAST UPDATED: 28 Mar 2008  (20080328/ED)

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http://www.cas.org/infopolicy.html

=> s cyclophane#
L4        4837 CYCLOPHANE#

=> s l4 and diamines
         29064 DIAMINES
L5          25 L4 AND DIAMINES

=> s l5 and complex
       1400406 COMPLEX
L6           5 L5 AND COMPLEX

=> d 1-5 bib aabs
'AABS' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB --------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
```

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                    its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
                    structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
                    its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
                    structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
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to view a specified Accession Number.
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=> d 1-5 bib abs
```
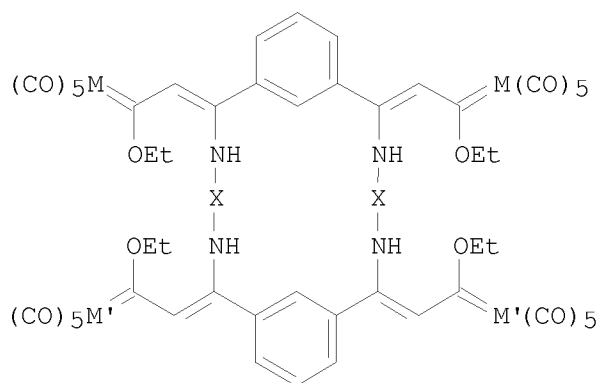
AN   2006:1079231 CAPLUS
DN   146:27919
TI   Structure-Activity Relationships for Cytotoxic Ruthenium(II) Arene
      Complexes Containing N,N-, N,O-, and O,O-Chelating Ligands
AU   Habtemariam, Abraha; Melchart, Michael; Fernandez, Rafael; Parsons, Simon;
      Oswald, Iain D. H.; Parkin, Andrew; Fabbiani, Francesca P. A.; Davidson,
      James E.; Dawson, Alice; Aird, Rhona E.; Jodrell, Duncan I.; Sadler, Peter
      J.
CS   School of Chemistry, University of Edinburgh, Edinburgh, EH9 3JJ, UK
SO   Journal of Medicinal Chemistry (2006), 49(23), 6858-6868
      CODEN: JMCMAR; ISSN: 0022-2623
PB   American Chemical Society
DT   Journal
LA   English
OS   CASREACT 146:27919

AB   Ruthenium arene complexes containing bidentate diamine, amino acid and
      diketonate chelate ligands were prepared by a variety of appropriate
      procedures and examined for cytostatic activity against human cancer cells.
      Organometallic Ru(II) complexes [(η6-arene)Ru(XY)Cl]Z, where XY is an
      N,N- (diamine), N,O- (e.g., amino acidate), or O,O- (e.g.,
      β-diketonate) chelating ligand, the arene ranges from benzene derivs.
      to fused polycyclic hydrocarbons, and Z is usually PF6, were prepared by
      direct or reduction-assisted complexation of arenes, substitution of
      cycloalkadiene or arene ligands with subsequent complexation of bidentate
      XY-ligands. The x-ray structures of 13 complexes are reported. All have
      the characteristic "piano-stool" geometry. The structure-activity
      relationships was evaluated for cytotoxicity of the prepared complexes
      against human cancer cells. The complexes most active toward A2780 human
      ovarian cancer cells contained XY = ethylenediamine (en) and extended
      polycyclic arenes. Complexes with polar substituents on the arene or XY =
      bipyridyl derivs. exhibited reduced activity. The activity of the
      O,O-chelated complexes depended strongly on the substituents and on the
      arene. For arene = p-cymene, XY = amino acidate complexes were inactive.
      Complexes were not cross-resistant with cisplatin, and cross-resistance to
      Adriamycin was circumvented by replacing XY = en with 1,2-
      phenylenediamine. Some complexes were also active against colon,
      pancreatic, and lung cancer cells.

L6   ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN   2003:213301 CAPLUS
DN   138:368989
TI   Synthesis and Electrochemical Properties of Novel Tetrametallic
      Macrocyclic Fischer Carbene Complexes
AU   Fernandez, Israel; Mancheno, Maria Jose; Gomez-Gallego, Mar; Sierra,
      Miguel A.
CS   Departamento de Quimica Organica, Facultad de Quimica, Universidad
      Complutense de Madrid, Madrid, 28040, Spain
SO   Organic Letters (2003), 5(8), 1237-1240
      CODEN: ORLEF7; ISSN: 1523-7060
PB   American Chemical Society
DT   Journal
LA   English
OS   CASREACT 138:368989
GI

I

AB   Metallomacrocyclic compds. [I; wherein M, M', independently = Cr, W; X =
      -C6H4-, -(C6H4)2-] can be easily prepared by 1,4-addition of diamines
      to α,β-unsatd. Fischer bis-carbene templates. This method
      allows the preparation of a new family of homo- and heterotetrametallic compds.
      having macrocyclic cyclophanic structures.

L6   ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN   2001:680382 CAPLUS
DN   136:6093
TI   Synthesis of Cyclophanic Chromium(0) Bis(carbene) Complexes
AU   Fernandez, Israel; Sierra, Miguel A.; Mancheno, Maria Jose; Gomez-Gallego,
      Mar; Ricart, Susagna
CS   Departamento de Quimica Organica Facultad de Quimica, Universidad
      Complutense, Madrid, 28040, Spain
SO   Organometallics (2001), 20(21), 4304-4306
      CODEN: ORGND7; ISSN: 0276-7333
PB   American Chemical Society
DT   Journal
LA   English
OS   CASREACT 136:6093

AB   Double Michael addition of 1,4- and 1,3-xylylenediamines and
        1,5-diaminopentane to the bimetallic α,β-unsatd.
        alkoxychromium(0) carbene complex m-
        C6H4[C.tplbond.CC(OEt):Cr(CO)5]2 4 produces in good to excellent yields
        the corresponding cyclophane bimetallic complexes as single
        isomers. In contrast, the reaction with 1,4-diaminobutane produces a
        different cyclophane complex, derived from a 1,2- +
        1,4-addition process.
RE.CNT 33   THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN   1988:131780 CAPLUS
DN   108:131780
TI   Polyaza-macrocycles of cyclophane type: synthesis, structure of
        a chloroform inclusion complex and anion binding
AU   Jazwinski, Jaroslaw; Lehn, Jean Marie; Meric, Robert; Vigneron, Jean
        Pierre; Cesario, Michele; Guilhem, J.; Pascard, Claudine
CS   Inst. Bel, Univ. Louis Pasteur, Strasbourg, Fed. Rep. Ger.
SO   Tetrahedron Letters (1987), 28(30), 3489-92
        CODEN: TELEAY; ISSN: 0040-4039
DT   Journal
LA   English
OS   CASREACT 108:131780
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB   Cyclocondensation of 4-HCOC6H4CH2C6H4CHO-4 with diamines, e.g.,
        H2NCH2CH2NH2, (H2NCH2CH2)2X (X = O, NSO2C6H4Me-4) gave 65-85% I and II,
        resp. I gave a CHCl3 inclusion complex, the crystal structure
        of which was determined Reduction of I by LiAlH4 gave tetramine III, which
binds
        dicarboxylate substrates.

L6   ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN   1984:434686 CAPLUS
DN   101:34686
OREF   101:5369a,5372a
TI   Cyclophane porphyrins and their metal complexes. Biomimetic
        study on receptor site of hemoprotein oxygen binding
AU   Ogoshi, Hisanobu; Sugimoto, Hiroshi; Miyake, Masao; Yoshida, Zenichi
CS   Fac. Eng., Kyoto Univ., Kyoto, 606, Japan
SO   Tetrahedron (1984), 40(3), 579-92
        CODEN: TETRAB; ISSN: 0040-4020
DT   Journal
LA   English
AB   A new sym. porphyrin, 7,8,17,18-tetraethyl-3,13-dimethylporphyrin-2,12-
        dipropionic acid, and its derivs. were synthesized by the a,c-biladiene
        route. Condensation of the dipropionic acid with diamine, [H2N(CH2)nNH2,
        n = 6, 7, 8, 9, 10, 12, and 14], afforded the corresponding
        cyclophane porphyrins. The bridged groups were characterized by
        the 1H NMR spectra of their Zn complexes. The spin state of the Fe3+
        complexes of the cyclophane porphyrins was investigated by
        changing the size of the bridged chain or size of axial ligand. The
        cyclophane-porphyrinato(III) perchlorate complexes in a mixture of
        MeOH and CHCl3 with 4-benzylpyridine provide a model for methemoproteins.
        Steric constraint between and axial ligand and the bridge group,
        [CH2CH2CONH(CH2)nNHCOCH2CH2] at the bridged face dets. the ratio of the

penta- and hexa-coordinated ferric complexes. The rate of O-binding to
the Co2+ cyclophane porphyrins is markedly dependent on the size
of the bridge chain. Removal of a solvent mol. or 6th axial ligand from
the near proximity of the Co2+ complex apparently increases the
rate of O binding.

=>

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